



POTENTIAL CONFLICTS WITH OFFSHORE WIND PROJECTS

**Prepared by NJ Department of Environmental Protection for
consideration by the Blue Ribbon Panel on Offshore Wind**

Frequently Asked Questions:

How Visible Would Offshore Wind Farms Be?

The ocean represents one of the last remaining New Jersey viewsheds with few manmade structures. Large numbers of visitors are drawn to the shore every year to enjoy this uninterrupted view of nature. Wind farms including turbines reaching up to 400 feet in height and placed off the coast less than 15-20 miles would be visible from shore.

Would the Installation of Offshore Wind Farms Affect Beach Replenishment?

A number of offshore sand borrow sites have been identified and approved as areas for shore protection/beach nourishment projects. These sites are often shoal areas, which are also the preferred locations for siting wind farms because of lower construction costs in these shallow areas. Construction of wind farms on shoals identified as borrow areas would likely impede access to these resources.

Do Wind Turbines Affect Birds?

The Jersey shore is one of the most important migratory flyways in the world. Large numbers of migratory birds, including threatened and endangered species, move through the region seasonally. In addition, NJ's coast is home to diverse populations of breeding birds that move and feed offshore. Direct impacts to birds include mortality from collision with turbines. Indirect impacts, which are more difficult to measure, involve birds altering flight paths to avoid wind turbine areas. Indirect impacts may be significant if wind farms are located in important feeding locations, such as shoals. Very little information regarding bird migratory patterns and ecology in offshore environments

exists. Without further study, any statement regarding the cumulative effects of turbines on birds is inconclusive.

Do Offshore Wind Farms Impact Marine Mammals and Turtles?

Species of marine mammals and sea turtles can be found along New Jersey's coastline. Some are transient and seasonal, while others remain in the area for lengthy periods. It is not known whether noise or other disturbances created by turbines or the structures themselves would interfere with these species. This concern is an area requiring additional investigation.

Would the Construction of Offshore Wind Turbines Affect Tourism?

Tourism is a critical part of New Jersey's economy, contributing \$30 billion in economic activity each year



and generating 416,000 jobs. In 2003, more than 50 million people visited the shore area. Coastal municipalities depend heavily on tourism revenue. Several communities, including Long Branch and Asbury Park, are working to revitalize their historic shoreline and tourism is essential for the recovery of these areas. Any impacts of offshore wind farms on views, birding, and property values have the potential to impact tourism. Recreational fishing could also be affected if a wind farm were sited on a shoal area popular for fishing. Over a million anglers fish New Jersey's saltwaters with over 6.8 million trips of fishing activity a year. The recreational fishery alone is annually worth \$1.5 billion to the economy of New Jersey.

Would Offshore Wind Farms Have Any Impact on Commercial Fishing?

Commercial fisheries in New Jersey provide employment to more than 21,000 people and have an annual economic impact on the State's economy of \$590 million. The ports of Cape May-Wildwood, Atlantic City and Point Pleasant are among the top 30 most important fishing ports in the US. The state is a leader in shellfish landings, particularly its surf clam, ocean quahog and sea scallop fisheries. These dredge fisheries cut into the ocean floor to harvest shellfish, raising concerns regarding fishing over power cables running from wind farms to the shore. Depending on the depth of cable burial, this may result in closure to fisheries in the vicinity of electric transmission cables. In addition, otter trawl fishermen, like shellfish dredgers, would not be able to operate in the vicinity of the wind farms because of the risk that the gear they employ could become entangled in the wind farm towers.

How Would Wind Farms Affect Navigation?

Considered together, the New York/New Jersey and Camden/Philadelphia ports are one of the largest import/export areas in the country. In order to avoid disruption of these ports, offshore wind farms would need to be sited to avoid port shipping lanes, offshore anchorages, lightering areas and approaches to navigable inlets.

Would wind farms pose any potential conflicts with aviation or defense activities?

Several offshore areas have special restrictions based on aviation and defense concerns. Height restrictions occur near airport and helipad approaches and takeoffs. The siting of wind farms may also be restricted because of potential interference with radar use. Naval and Coast Guard installations along the coast may have additional issues to be addressed to avoid interference with defense operations.

Would wind farms conflict with other manmade structures in the ocean?

Numerous telecommunication cables are located off the NJ coast, as are electrical cables, shipwrecks, and artificial reefs. Wind farms and their associated power transmission would need to be carefully designed and sited to protect these structures and historic resources.

State of New Jersey Blue Ribbon Panel on Development of Wind Turbine Facilities in Coastal Waters

Edward J. McKenna, Jr., Mayor of Red Bank and a member of the State Planning Commission. Mr. McKenna will chair the Blue Ribbon Panel.

Bradley M. Campbell, Commissioner, Department of Environmental Protection

Jeanne Fox, President of the Board of Public Utilities

Virginia S. Bauer, Chief Executive Officer and Secretary of the New Jersey Commerce, Economic Growth and Tourism Commission

Timothy P. Dillingham, Executive Director of the American Littoral Society

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Bonnie J. McCay, PhD, a Rutgers Board of Governors Distinguished Service Professor at Cook College. She is currently Vice Chair of the Marine Protected Areas Federal Advisory Committee, U.S. Department of Commerce and Department of Interior.

Diane Wieland, Director of the Cape May County Department of Tourism, Chair of the Southern Shore Regional Tourism Council, and member of the Governor's Tourism Advisory Council.

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